## Historic American Engineering Record Index to Photographs

HAER ID 9-CAB, IA-

Washington Water Power Clark Fork River
Cabinet Gorge Hydroelectric Development, Powerhouse HAER No. ID-37-A
Cabinet
Bonner County
Idaho

## Kristi Hager, Photographer, January 1999

ID-37-A-1. Pipe Floor Rear Corridor, view to the southeast. The wall of Unit 2 turbine pit is visible in the right foreground. The pipe and valve cluster in the right foreground is part of the blow down valve for Unit 2. This valve allows the water in the draft chest to be lowered (i.e., "blown down") so that the unit can be motored (i.e., run like an electric motor rather than an electric power generator).

ID-37-A-2. Pipe Floor Front Corridor, view to the northwest, with Unit 4 turbine pit visible in right foreground of photograph. One of the governor compressors, originally used as an air blast circuit breaker compressor, is visible in the left foreground with one of the station sump and unwatering pump clusters located just beyond the compressor.

ID-37-A-3. Unit 4 Turbine Pit Shaft and Operating Ring, view to the northeast. One of the servo motor housings is visible in the right background of the photograph. Notice the wicket gate linkage greasing tubes along the top of the operating ring.

ID-37-A-4. Unit 4 Turbine Pit Oil Jacking Pump and Wicket Gate Linkages, view to the north. The jacking pump, located along the wall on the left side of photograph, is used for pumping oil to lift the thrust bearing prior to starting the unit. Note the wicket gate linkages attached to the operating ring and visible in the lower center of the photograph.

ID-37-A-5. Station Unwatering Pumps and Sump Pump for Units 1 and 2, view to the west. The unwatering pumps are the two larger items toward the right side of the photograph (one in foreground and one in background. The smaller item toward the left of the photograph is the sump pump. These pumps are used for draining water from the draft chest for maintenance.

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- ID-37-A-6. Fire Protection (high pressure), view to the east. Located on the pipe floor between Unit 3 and Unit 4, the high pressure CO<sub>2</sub> tanks are connected to the generator barrel of all four units.
- ID-37-A-7. Unit 3 Service Water System Valves, view to the east. These pipes and valves supply water from the draft chest for cooling the generator barrels.
- ID-37-A-8. Load Center 3, view to the north.
- ID-37-A-9. Water Purification System and Instrument Air Receiver Tank, view to the south. The water purification system is visible in the right foreground of the photograph and the instrument air receiver tank is visible in the right background of the photograph.
- ID-37-A-10. Station Air Compressors, view to the north. The compressors, visible in the center of the photograph, are linked to the large accumulator tanks visible in the right background of the photograph. Note that part of the compressor in the center foreground of the photograph is disassembled for maintenance.
- ID-37-A-11. Station Accumulator Tanks, view to the northeast. The tanks are visible along the right side of photograph, opposite a wall of the Unit 1 turbine pit.
- ID-37-A-12. Sewage Ejector Pumps, view to the southwest. These pumps are connected to sewage treatment tanks.
- ID-37-A-13. Greasing Pump and Governor Accumulator Tank Compressors, view to the west. The greasing pump, visible in left foreground, services all four turbine pits.
- ID-37-A-14. Station Control Batteries and Battery Chargers, view to the northeast. The original battery charger is the center cabinet on the left side of photograph, with the new charger on the far left of photograph and a circuit breaker unit for the chargers is visible in the center of the photograph. The batteries are visible on three racks through the open doorway.
- ID-37-A-15. Potential Transformer for Unit 2 and Operating Floor Front Corridor, view to the east-southeast.

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ID-37-A-16. Bus Room (also known as Switch Gear Room), view to the southeast. An air circuit breaker compressor (visible in photograph number 2) was once attached to the main bus relay visible in the background of the photograph.

ID-37-A-17. Station Power Center 1 and Load Center 1, view to the northwest. The power center is the cabinet on the right and the load center is the cabinet on the left of the photograph. A door to the generator barrel of Unit 1 is visible in the background.

ID-37-A-18. Governor Housing for Units 1 and 2, view to the west. The original analog displays have been replaced with digital displays. See photograph ID-37-A-19.

ID-37-A-19. Oil Storage Tanks, view to the northwest.

ID-37-A-20. Governor Accumulator Tanks for Units 1 and 2, view to the north.

ID-37-A-21. Unit 2 Accumulator Tank, Governor Housing, Load Center 1 and Power Center 1, view to the north. The accumulator tank is in the foreground in front of the governor cabinet, with load center 1 and power center 1 in background.

ID-37-A-22. Fire Protection Water Pump (low pressure), view to the southwest.